Introduced by Assembly Member Bradford

February 21, 2014

An act to amend Section 25402.1 of the Public Resources Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2581, as introduced, Bradford. Energy: public domain computer program.

Existing law requires the California Energy Commission to prescribe, by regulation, lighting, insulation climate control system, and other building design and construction standards that increase the efficiency in the use of energy and water for new residential and new nonresidential buildings. Existing law also requires the commission to prescribe, by regulation, energy and water conservation design standards for new residential and new nonresidential buildings. In order to implement these requirements, existing law requires the commission to develop a public domain computer program that enables contractors, builders, architects, engineers, and government officials to estimate energy consumed by residential and nonresidential buildings and requires the commission to establish a formal process for certification of compliance options for new products, materials, and calculation methods, as prescribed.

This bill would require the commission to ensure that the public domain computer program and the compliance options produce an estimate of energy consumption for residential and nonresidential buildings that has an accuracy within 5% of actual energy consumption for residential and nonresidential buildings.

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Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 25402.1 of the Public Resources Code 2 is amended to read:
- 3 25402.1. (a) In order to implement the requirements of 4 subdivisions (a) and (b) of Section 25402, the commission shall 5 do all of the following:
- 6 (a)

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- (1) Develop a public domain computer program—which that will enable contractors, builders, architects, engineers, and government officials to estimate the energy consumed by residential and nonresidential buildings. The commission may charge a fee for the use of the program, which—fee shall be based upon the actual cost of the program, including any computer costs.
- 13 (b)
- 14 (2) Establish a formal process for certification of compliance options for new products, materials, and calculation methods which 15 16 that provides for adequate technical and public review to ensure 17 accurate, equitable, and timely evaluation of certification 18 applications. Proponents filing applications for new products, 19 materials, and calculation methods shall provide all information 20 needed to evaluate the application that is required by the 21 commission. The commission shall publish annually the results 22 of its certification decisions and instructions to users and local 23 building officials concerning requirements for showing compliance 24 with the building standards for new products, materials, or 25 calculation methods. The commission may charge and collect a 26 reasonable fee from applicants to cover the costs under this 27 subdivision paragraph. Any funds received by the commission for purposes of this subdivision shall be deposited in the Energy 28 29 Resources Programs Account and, notwithstanding Section 13340 30 of the Government Code, are continuously appropriated to the 31 commission for the purposes of this subdivision. Any 32 unencumbered portion of funds collected as a fee for an application 33 remaining in the Energy Resources Programs Account after 34 completion of the certification process for that application shall 35 be returned to the applicant within a reasonable period of time.

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(3) Include a prescriptive method of complying with the standards, including design aids such as a manual, sample calculations, and model structural designs.

(d)

- (4) Conduct a pilot project of field testing of actual residential buildings to calibrate and identify potential needed changes in the modeling assumptions to increase the accuracy of the public domain computer program specified in subdivision (a) paragraph (1) and to evaluate the impacts of the standards, including, but not limited to, the energy savings, cost effectiveness, and the effects on indoor air quality. The pilot project shall be conducted pursuant to a contract entered into by the commission. The commission shall consult with the participants designated pursuant to Section 9202 of the Public Utilities Code, as that section read on December 31, 2003, to seek funding and support for field monitoring in each public utility service territory, with the University of California to take advantage of its extensive building monitoring expertise, and with the California Building Industry Association to coordinate the involvement of builders and developers throughout the state. The pilot project shall include periodic public workshops to develop plans and review progress. The commission shall prepare and submit a report to the Legislature on progress and initial findings not later than December 31, 1988, and a final report on the results of the pilot project on residential buildings not later than June 30, 1990. The report shall include recommendations regarding the need and feasibility of conducting further monitoring of actual residential and nonresidential buildings. The report shall also identify any revisions to the public domain computer program and energy conservation standards if the pilot project determines that revisions are appropriate.
- (5) Ensure that the public domain computer program developed pursuant to paragraph (1) and compliance options required pursuant to paragraph (2) produce an estimate of energy consumption for residential and nonresidential buildings that has an accuracy within 5 percent of actual energy consumption for residential and nonresidential buildings.

38 (e) 39 (6)

(6) Certify, not later than 180 days after approval of the standards by the State Building Standards Commission, an energy

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conservation manual for use by designers, builders, and contractors

- of residential and nonresidential buildings. The manual shall be
- 3 furnished upon request at a price sufficient to cover the costs of
- 4 production and shall be distributed at no cost to all affected local
- 5 agencies. The manual shall contain, but not be limited to, the
- 6 following: 7
 - (1)
 - (A) The standards for energy conservation established by the commission.
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- (B) Forms, charts, tables, and other data to assist designers and builders in meeting the standards.
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- 14 (C) Design suggestions for meeting or exceeding the standards.
- 15 (4)
 - (D) Any other information which the commission finds will assist persons in conforming to the standards.
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 - (E) Instructions for use of the computer program for calculating energy consumption in residential and nonresidential buildings.

 - (F) The prescriptive method for use as an alternative to the computer program.
 - (f) The commission shall establish
 - (7) Establish a continuing program of technical assistance to local building departments in the enforcement of subdivisions (a) and (b) of Section 25402 and this section. The program shall include the training of local officials in building technology and enforcement procedures related to energy conservation, and the development of complementary training programs conducted by local governments, educational institutions, and other public or private entities. The technical assistance program shall include the preparation and publication of forms and procedures for local building departments in performing the review of building plans and specifications. The commission shall provide, on a contract basis, a review of building plans and specifications submitted by a local building department, and shall adopt a schedule of fees sufficient to repay the cost of those services.
- 39 (g)

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(b) Subdivisions (a) and (b) of Section 25402 and this section, and the rules and regulations of the commission adopted pursuant thereto, to those provisions, shall be enforced by the building department of every city, county, or city and county.

- (1) No-A building permit for any a residential or nonresidential building shall *not* be issued by a local building department, unless a review by the building department of the plans for the proposed residential or nonresidential building contains detailed energy system specifications and confirms that the building satisfies the minimum standards established pursuant to subdivision (a) or (b) of Section 25402 and this section applicable to the building.
- (2) Where there is no local building department, the commission shall enforce subdivisions (a) and (b) of Section 25402 and this section.
- (3) If a local building department fails to enforce subdivisions (a) and (b) of Section 25402 and this section or any other provision of this chapter or standard adopted pursuant thereto, the commission may provide enforcement after furnishing 10 days' written notice to the local building department.
- (4) A city, county, or city and county may, by ordinance or resolution, prescribe a schedule of fees sufficient to pay the costs incurred in the enforcement of subdivisions (a) and (b) of Section 25402 and this section. The commission may establish a schedule of fees sufficient to pay the costs incurred by that enforcement.
- (5) No–The construction of—any a state building shall not commence until the Department of General Services or the state agency that otherwise has jurisdiction over the property reviews the plans for the proposed building and certifies that the plans satisfy the minimum standards established pursuant to-subdivision (a) or (b) of Chapter 2.8 (commencing with Section 15814.30) of Part 10b of Division 3 of Title 2 of the Government Code, subdivision (a) or (b) of Section 25402, and this section—which that are applicable to the building.

(h)

(c) Subdivisions (a) and (b) of Section 25402 and this section shall apply only to new residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to those sections that are applicable to those

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buildings. Nothing in those Those sections shall not prohibit either of the following:

- (1) The enforcement of state or local energy conservation or energy insulation standards, adopted prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section with regard to residential and nonresidential buildings on which actual site preparation and construction have commenced prior to that date.
- (2) The enforcement of city or county energy conservation or energy insulation standards, whenever adopted, with regard to residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section, if the city or county files the basis of its determination that the standards are cost effective with the commission and the commission finds that the standards will require the diminution of energy consumption levels permitted by the rules and regulations adopted pursuant to those sections. If, after two or more years after the filing with the commission of the determination that those standards are cost effective, there has been a substantial change in the factual circumstances affecting the determination, upon application by any interested party, the city or county shall update and file a new basis of its determination that the standards are cost effective. The determination that the standards are cost effective shall be adopted by the governing body of the city or county at a public meeting. If, at the meeting on the matter, the governing body determines that the standards are no longer cost effective, the standards shall, as of that date, be unenforceable and no building permit or other entitlement shall be denied based on the noncompliance with the standards.

(i)

(d) The commission may exempt from the requirements of this section and of any regulations adopted pursuant—thereto to this section any proposed building for which compliance would be impossible without substantial delays and increases in cost of construction, if the commission finds that substantial funds have been expended in good faith on planning, designing, architecture, or engineering prior to the date of adoption of the regulations.

40 (j)

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(e) If a dispute arises between an applicant for a building permit, or the state pursuant to paragraph (5) of subdivision—(g) (b), and the building department regarding interpretation of Section 25402 or the regulations adopted pursuant thereto, either party may submit the dispute to the commission for resolution. The commission's determination of the matter shall be binding on the parties.

7 (k)

(f) Nothing in Section 25130, 25131, or 25402, or in this section prevents enforcement of any regulation adopted pursuant to this chapter, or Chapter 11.5 (commencing with Section 19878) of Part 3 of Division 13 of the Health and Safety Code as they existed prior to September 16, 1977.